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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/661,218	09/12/2003	Harry Bims	1875.7300001	7178
49579 7590 11/12/2008 STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C. 1100 NEW YORK AVENUE, N.W. WASHINGTON, DC 20005				
EXAMINER CHURNET, DARGAYE H				
ART UNIT 2419		PAPER NUMBER		
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/661,218

**Applicant(s)**

BIMS ET AL.

**Examiner**

DARGAYE H. CHURNET

**Art Unit**

2419

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 17 July 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 9, 10, 26, 27, 29 and 30 is/are pending in the application.
- 4a) Of the above claim(s) 1-8, 11-25, 28 and 31-40 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 9, 10, 26, 27, 29 and 30 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-846)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 4/22/08 and 7/17/08
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**Detailed Action**

***Allowability Withdrawn***

1. The indicated allowability of claims 9, 10, 26, 27, 29, and 30 is withdrawn in view of the newly discovered reference(s) to Varghese and Honksalo. Rejections based on the newly cited reference(s) follow.

***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 9, 10, and 26 are rejected under 35 U.S.C. 102(e) as being anticipated by Varghese et al. (cited 5,963,556).

For claim 9, Varghese discloses a method, comprising: periodically transmitting, at a switch (see fig. 5, bridge 152), a heartbeat message (see col. 13, lines 35-38, bridge periodically sends hello messages to router 150) to a network having one or more repeaters (see fig. 5, router 150), the heartbeat message including a VLAN ID identifying the switch (see col. 13, lines 38-40, wherein the hello messages contain the VLAN ID of the bridge); and in response to a response from a repeater (see col. 13, lines 44-46, wherein the router 150 responds with OnHello), transmitting VLAN configuration information to the repeater (see col. 14, lines 9-11, wherein the bridge 152 sends hellos after the link is turned ON), the VLAN configuration information including a

VLAN ID identifying each traffic criteria (see col. 13, lines 38-39, wherein the hellos contain VLAN ID and type of all VLANs known to the bridge 152).

For claim 10, Varghese discloses downloading operating software to the repeater to enable the repeater to operate (see col. 6, lines 48-50, wherein the bridge's software to operate is updated).

For claim 26, Varghese discloses a method, comprising: determining at a repeater that a connection between the repeater and a switch is down, based on at least one of a heartbeat, beacon, and/or data messages received from the switch (see col. 5, lines 41-44, wherein it is determined if the connection between the bridge and router is down, and the two communicate through periodic hello messages); and in response to the determination, performing a reset process within the repeater that enables the repeater to reestablish a new connection with the switch (see col. 13, lines 25-27, wherein the link between the bridge and router is reset) wherein the reset process further comprises: listening at the repeater all messages broadcasted over a network (see col. 13, lines 39-40, wherein the bridge receives hello messages from the router); identifying at least one message that is associated with the switch (see col. 13, lines 39-40, wherein the bridge receives hello messages from the router), the message associated with the switch including a VLAN ID identifying the switch (see col. 13, lines 48-55, wherein the router sends VLAN ID information to the bridge); and establishing a

connection with the switch using the VLAN ID (see col. 14, lines 9-11, wherein a connection is formed between bridge 152 and router 150).

### **Claim Rejections - 35 USC § 103**

3. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Varghese in view of Ichikawa (cited 6,307,837).

For claim 27, Varghese discloses a method, comprising: determining at a repeater that a connection between the repeater and a switch is down, based on at least one of a heartbeat, beacon, and/or data messages received from the switch (see col. 5, lines 41-44, wherein it is determined if the connection between the bridge and router is down, and the two communicate through periodic hello messages); and in response to the determination, performing a reset process within the repeater that enables the repeater to reestablish a new connection with the switch (see col. 13, lines 25-27, wherein the link between the bridge and router is reset) wherein the reset process comprises: receiving VLAN (virtual local area network) configuration information from the switch (see col. 13, lines 39-40, wherein the bridge receives hello messages from the router); downloading operating software from the switch to launch an operating environment of the repeater (see col. 6, lines 48-50, wherein the bridge's software to operate is updated); and communicating with the switch using the VLAN configuration information in subsequent communications (see col. 14, lines 9-11, wherein a connection is formed between bridge 152 and router 150).

Varghese fails to disclose broadcasting a message at the repeater to the switch, the broadcasted message indicating that the repeater is entering the network. Ichikawa from the same or similar fields of endeavor teaches broadcasting a message (fig. 14, communication startup request signal 18-1) at a repeater (fig. 14, wireless packet terminal 1-7) to the switch (fig. 14, wireless base station 1-6), the broadcasted message indicating that the repeater is entering the network (fig. 14, communication startup signal 18-1, communication will be started with the base station when the wireless packet terminal enters the network). Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to incorporate the elements above stated by Ichikawa in the network of Varghese. The method taught by Ichikawa is modified/implemented into the network of Varghese by broadcasting message from the repeater to the switch. The motivation for broadcasting a message at the repeater to the switch, the broadcasted message indicating that the repeater is entering the network is to alert the switch and other members of the network that the repeater is entering the network simultaneously.

6. Claims 29 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Varghese in view of Honkasalo et al. (cited 6,091,717).

For claim 29, Varghese discloses a method, comprising: determining, at a switch based on heartbeat messages or other responses received from a first repeater, that a connection between the switch and the first repeater is down (see col. 5, lines 41-44, wherein it is determined if the connection between the bridge and router is down, and

the two communicate through periodic hello messages). Varghese fails to disclose in response to the determination, determining, after a predetermined period of time, whether there is still at least one mobile station associated with the first repeater; and reassociating the at least one mobile station with a second repeater if there is still at least one mobile station associated with the first repeater. Ichikawa from the same or similar fields of endeavor teaches in response to the determination, determining, after a predetermined period of time, whether there is still at least one mobile station associated with the first repeater; and reassociating the at least one mobile station with a second repeater if there is still at least one mobile station associated with the first repeater (see col. 6, lines 33-62, wherein the mobile station reassociates from one base station to another during a soft handoff process). Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to incorporate the elements above stated by Ichikawa in the network of Varghese. The method taught by Ichikawa is modified/implemented into the network of Varghese by using soft handoff methods. The motivation for in response to the determination, determining, after a predetermined period of time, whether there is still at least one mobile station associated with the first repeater; and reassociating the at least one mobile station with a second repeater if there is still at least one mobile station associated with the first repeater to allow the mobile station to communicate with an active repeater.

For claim 30, Honkasalo teaches performing a token handoff process from the first repeater to the second repeater to allow the second repeater to communicate with



the mobile station as a primary repeater (see col. 6, lines 33-62, wherein the soft handoff process includes a token handoff process).

### ***Response to Arguments***

7. Applicant's arguments with respect to claims 9, 10, 26, 27, 29, and 30 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dargaye H. Churnet whose telephone number is 571-270-1417. The examiner can normally be reached on Monday-Friday from 7:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chirag Shah can be reached on 571-272-3144. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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